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10/801,568	03/17/2004	Masaya Hashimoto	325772034800	3453

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EXAMINER

MCLEAN, NEIL R

ART UNIT

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2625

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/801,568

Applicant(s)

HASHIMOTO ET AL.

Examiner

NEIL R. MCLEAN

Art Unit

2625

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-7 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-7 and 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of Claims

1. Claims 5-7, and 12-14 are pending in this application.

Claims 5-7, and 12-14 have been amended.

Response to Arguments

2. Applicant's arguments with respect to Claims 5-7 and 12-14 have been considered but are moot in view of the new ground(s) of rejection.

Regarding Applicant's Argument (page 5, lines 19-23):

"Sato does not disclose or suggest a data processing apparatus including an attribute discriminator, as claimed. The Examiner contends that Sato's step S 15004 in Fig. 15 corresponds to this feature. But step S 15004 only relates to acquiring an attribute and does not involve discriminating the acquired attribute, much less discriminating whether the attribute is monochrome or color, as claimed. Accordingly, Sato fails to disclose or suggest this feature." and

Regarding Applicant's Argument (page 6, lines 1-14):

"In addition, Sato does not disclose or suggest a data processing apparatus including a controller, as claimed. The Examiner contends that Sato discloses the controller because an S-TIFF file format can be selected for a monochrome image and

a PDF file format can be selected for a color image. Applicants respectfully disagree.

First, as discussed during the interview, there is no

indication in Sato that the size of the block of the data to be compressed by a compressor is set to a size of a divisional unit obtained by dividing the size of a page unit by plural numbers as claimed. Rather, Sato's Fig. 5 merely indicates that the PDF file includes multiple images. There is no disclosure that these images correspond to a divisional unit obtained by dividing the size of a page unit by plural numbers. Second, Sato does not disclose or suggest setting the size of the block of the data to be compressed based on a discrimination result of an attribute discriminator, as claimed. As discussed above, Sato does not disclose or suggest actually discriminating whether an attribute is monochrome or color. Consequently, Sato does not disclose or suggest setting the size of the block of the data to be compressed based on a discrimination result. Accordingly, Sato fails to disclose or suggest this feature."

Examiner's Response:

Sato substantially discloses the invention of claim 1 however Sato does not expressly disclose the setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the attribute of the data is color.

Suzuki discloses the setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the attribute of the data is color (e.g., dividing

the image data into plural tiles of a predetermined size; Abstract)(Figure 9, STEPS S9011/S9012 and S9013 wherein JPEG (color) data is encoded into packets (tile images); {0008})(JPEG system for a multi-value color image (including multi-value gray scale image) and the PackBits system for a binary image{0099})

Hence the prior art includes each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of an actual combination of the elements in a single prior art reference. Sato and Suzuki are combinable because they are from the same field of endeavor of image processing; e.g., both references disclose methods of dividing image data for processing in a MFP. Therefore one of ordinary skill in the art could have combined the elements as claimed by known methods, and that in combination, each element merely performs the same function as it does separately. The results of the combination would have been predictable and resulted in modifying the invention of Sato to include the setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the attribute of the data is color. The suggestion/motivation for doing so is to divide image data into packets (tile images) and to efficiently execute the image processing in the unit of each packet as disclosed by Suzuki in the Summary of Invention. Suzuki further discloses that image processing has conventionally been executed in the unit of a page but that this is difficult to processing plural images at the same time. Therefore, it would have been obvious to combine Suzuki's setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the

attribute of the data is color with Sato's image processing apparatus to obtain the invention as specified to more efficiently process image data.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-7 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (US 6,982,811) in view of Suzuki et al. (US 2003/0151759) hereinafter 'Suzuki'.

Regarding Claim 5: (Currently Amended)

Sato discloses a data processing apparatus (Figure 2), comprising:

a compressor which compresses every block of inputted job data into compressed data (Image Compression Section 2040; Column 3, lines 54-57);

a memory which stores the compressed data (RAM 2002; Column 3, lines 23-25);

an attribute discriminator (job management component 3003) configured to discriminate whether an attribute of the inputted job data is monochrome or color (When a read instruction is input in step S6006, the job management component 3003 notifies the scanner management component 3004 of

the resolution and the monochrome or color read mode. The scanner management component 3004 causes the scanner 2070 to operate in the designated monochrome or color read mode; Column 6, lines 26-29); and

a controller (Controller 2000) which sets a size of the block of the data to be compressed by said compressor to a size of the page unit when an attribute of the data is monochrome (In the monochrome read mode, the image data are...converted into a plurality of S-TIFF files in units of pages; Column 6, lines 36-40),

Sato substantially discloses the invention of claim 1 however Sato does not expressly disclose the setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the attribute of the data is color.

Suzuki discloses the setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the attribute of the data is color (e.g., dividing the image data into plural tiles of a predetermined size; Abstract)(Figure 9, STEPS S9011/S9012 and S9013 wherein JPEG (color) data is encoded into packets (tile images); [0008]) (JPEG system for a multi-value color image (including multi-value gray scale image) and the PackBits system for a binary image; [0099])

Hence the prior art includes each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of an actual combination of the elements in a single prior art reference. Sato and Suzuki are combinable because they are from the same field of endeavor of image processing; e.g., both references disclose methods of dividing image data for processing in a MFP. Therefore one of ordinary skill in the art could have

combined the elements as claimed by known methods, and that in combination, each element merely performs the same function as it does separately. The results of the combination would have been predictable and resulted in modifying the invention of Sato to include the setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the attribute of the data is color. The suggestion/motivation for doing so is to divide image data into packets (tile images) and to efficiently execute the image processing in the unit of each packet as disclosed by Suzuki in the Summary of Invention. Suzuki further discloses that image processing has conventionally been executed in the unit of a page but that this is difficult to processing plural images at the same time. Therefore, it would have been obvious to combine Suzuki's setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the attribute of the data is color with Sato's image processing apparatus to obtain the invention as specified to more efficiently process image data.

Regarding Claim 12:

The proposed combination of Sato and Suzuki, explained in the rejection of apparatus claim 1, renders obvious the steps of the method of claim 12 because these steps occur in the operation of the proposed combination as discussed above. Thus, the arguments similar to that presented above for claim 1 are equally applicable to claim 12.

Regarding Claim 6: (Currently Amended)

Sato discloses a data processing apparatus (Figure 2), comprising:

a compressor which compresses every block of inputted job data into compressed data (Image Compression Section 2040; Column 3, lines 54-57);

a memory which stores the compressed data (RAM 2002; Column 3, lines 23-25);

an attribute discriminator (job management component 3003) configured to discriminate whether an attribute of the inputted job data is binary data or multi-valued data (When a read instruction is input in step S6006, the job management component 3003 notifies the scanner management component 3004 of the resolution and the monochrome or color read mode. The scanner management component 3004 causes the scanner 2070 to operate in the designated monochrome or color read mode; Column 6, lines 26-29); and

a controller (Controller 2000) which sets a size of the block of the data to be compressed by said compressor to a size of the page unit when an attribute of the data is binary data (e.g., for a monochrome image, single page tag image file format (S-TIFF) can be selected; Column 5, lines 44-46; also Column 3, lines 56-57 which discloses the use of binary data),

Sato substantially discloses the invention of claim 6 however Sato does not expressly disclose the setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the attribute of the data is multi-valued data.

Suzuki discloses the setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the attribute of the data is multi-valued

data (e.g., dividing the image data into plural tiles of a predetermined size; Abstract)(Figure 9, STEPS S9011/S9012 and S9013 wherein JPEG (color) data is encoded into packets (tile images); [0008])(JPEG system for a multi-value color image (including multi-value gray scale image) and the PackBits system for a binary image;[0099])

Hence the prior art includes each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of an actual combination of the elements in a single prior art reference. Sato and Suzuki are combinable because they are from the same field of endeavor of image processing; e.g., both references disclose methods of dividing image data for processing in a MFP. Therefore one of ordinary skill in the art could have combined the elements as claimed by known methods, and that in combination, each element merely performs the same function as it does separately. The results of the combination would have been predictable and resulted in modifying the invention of Sato to include the setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the attribute of the data is multi-valued data. The suggestion/motivation for doing so is to divide image data into packets (tile images) and to efficiently execute the image processing in the unit of each packet as disclosed by Suzuki in the Summary of Invention. Suzuki further discloses that image processing has conventionally been executed in the unit of a page but that this is difficult to processing plural images at the same time. Therefore, it would have been obvious to combine Suzuki's setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the attribute of the data is multi-valued data with Sato's image

processing apparatus to obtain the invention as specified to more efficiently process image data.

Regarding Claim 13:

The proposed combination of Sato and Suzuki, explained in the rejection of apparatus claim 6, renders obvious the steps of the method of claim 13 because these steps occur in the operation of the proposed combination as discussed above. Thus, the arguments similar to that presented above for claim 6 are equally applicable to claim 13.

Regarding Claim 7: (Currently Amended)

Sato discloses a data processing apparatus (Figure 2), comprising:

a compressor which compresses every block of inputted job data into compressed data (Image Compression Section 2040; Column 3, lines 54-57);

a memory which stores the compressed data (RAM 2002; Column 3, lines 23-25);

an attribute discriminator (job management component 3003) configured to discriminate whether an attribute of the inputted job data is a FAX/copy job (e.g., when the data transmission protocol described at Column 4, lines 6-30 wherein a fax or copy job is instructed); and

a controller (Controller 2000) which sets a size of the block of the data to be compressed by said compressor to a size of the page unit when an attribute of the data is a job other than a FAX/copy job (e.g. For a monochrome image which is not a FAX/copy job, single page tag image file format (S-TIFF) can be selected; Column 5, lines 44-46),

Sato substantially discloses the invention of claim 7 however Sato does not expressly disclose the setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the attribute of the data is a FAX/copy job.

Suzuki discloses the setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the attribute of the data is a FAX/copy job (e.g., dividing the image data into plural tiles of a predetermined size; Abstract)(Figure 9, STEPS S9011/S9012 and S9013 wherein JPEG (color) data is encoded into packets (tile images); [0008])(JPEG system for a multi-value color image (including multi-value gray scale image) and the PackBits system for a binary image;[0099])

Hence the prior art includes each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of an actual combination of the elements in a single prior art reference. Sato and Suzuki are combinable because they are from the same field of endeavor of image processing; e.g., both references disclose methods of dividing image data for processing in a MFP. Therefore one of ordinary skill in the art could have combined the elements as claimed by known methods, and that in combination, each element merely performs the same function as it does separately. The results of the combination would have been predictable and resulted in modifying the invention of Sato to include the setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the attribute of the data is a FAX/copy job. The suggestion/motivation for doing so is to divide image data into packets (tile images) and

to efficiently execute the image processing in the unit of each packet as disclosed by Suzuki in the Summary of Invention. Suzuki further discloses that image processing has conventionally been executed in the unit of a page but that this is difficult to processing plural images at the same time. Therefore, it would have been obvious to combine Suzuki's setting of the size of the block of the data to be compressed by said compressor to a size of a divisional unit obtained by dividing the size of the page unit by plural numbers when the attribute of the data is a FAX/copy job with Sato's image processing apparatus to obtain the invention as specified to more efficiently process image data.

Regarding Claim 14:

The proposed combination of Sato and Suzuki, explained in the rejection of apparatus claim 7 renders obvious the steps of the method of claim 14 because these steps occur in the operation of the proposed combination as discussed above. Thus, the arguments similar to that presented above for claim 7 are equally applicable to claim 14.

Examiner Notes

5. The Examiner cites particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully considers the

references in its entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or as disclosed by the Examiner.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NEIL R. MCLEAN whose telephone number is (571)270-1679. The examiner can normally be reached on Monday through Thursday 7:30AM-6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571.272.7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NEIL R MCLEAN/
Examiner, Art Unit 2625

/David K Moore/
Supervisory Patent Examiner, Art Unit 2625